## ABSTRACT

A method and system for providing a remote switching engine to monitor and control network traffic and utilizing appended word source address port mapping is provided. The system comprises a number of ports, at least one local switching device,

5   at least one local forwarding database, and a remote switching processing device. The ports are provided for sending and receiving frames. The local switching device performs high-speed switching. The local forwarding database corresponds and couples to the local switching device, the database allowing the local switching device to look up a known address that has been previously obtained and forward the frames

10  based on the known address. The remote switching processing device receives and processes frames from the local switching device(s). The local switching device(s) learns associations between Media Access Control (MAC) addresses and ports by having the local switching device forward unknown address frames to the remote switching processing device. The remote switching processing device update the local

15  forwarding database corresponding to the local switching device based on the forwarded frames, utilizing the appended word source address mapping. The appended word of a frame transmitted from one switching device to another switching device has encoded within an ingress engine number and port number.